REA JET

REA JET Fiber Laser FL
Tamper-Proof Marking with Light

Innovative Marking and Coding Solutions for Industry

Industrial marking with Fiber Laser systems from REA JET offers a distinct advantage: it is consumable and virtually maintenance-free, i.e. it involves low operating costs. Working with the REA JET FL Fiber Laser Marking System is simple and intuitive. It has a graphical operating panel, using a modern rotary knob with push-button function.

Unique in the world is just one overall operating concept, used for both the REA JET laser and the REA JET inkjet systems, using a single set of interfaces! Parallel user interfaces therefore enable your operating personnel to take charge of several methods of marking. And that will save you both money and time.

The compact design and the easy to rotate marking head of the REA JET FL allow for simple mechanical integration. Included in delivery is a pilot laser that ensures the system is swiftly set up for operation with new products. New Generation digital beam deflecting mirrors provide for the highest possible operating speed, but with enough capability in reserve.

Operation of, or training on, the REA JET FL, using a PC – as well as remote maintenance by PC – is made possible by means of its integrated VNC server. No matter where you are, by means of the integrated web server you are able to control your REA JET marking system from any web browser available; there is no need to install further software. The remote mainte-nance tool for remote diagnostics and support is included in delivery.

Possible applications of the REA JET FL are

- Engraving and annealing metals
- Colour inscription of untreated and with additives doped plastics
- Day and night design
- Coated substrates

Advantages of Fiber Laser: REA JET FL

- Newest compact lens technology
- Single overall operating concept, for both laser and inkjet marking
- Easy-to-learn and intuitive operation (graphical user interface)
- Integrated VNC server and web server, for remote diagnostics and maintenance
- Clear presentation of laser parameters with guided input and result preview
- Pilot laser included in delivery
- Easy integration, due to compact design
- Digital beam deflecting mirrors, allowing highest possible operating speed
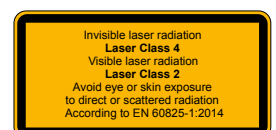- Ethernet communication with unique communica-tion protocols for both laser and inkjet systems

FL Operating Terminal

CE

Invisible laser radiation
Laser Class 4
Visible laser radiation
Laser Class 2
Avoid eye or skin exposure
to direct or scattered radiation
According to EN 60825-1:2014

DANGER

VISIBLE AND/OR INVISIBLE LASER RADIATION

AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION

CLASS IV LASER PRODUCT

ALIGNMENT LASER DIODE INSTALLED
CLASS II LASER RADIATON ALSO EMITTED
DO NOT STARE INTO BEAM
MAXIMUM OUTPUT: 1mW cw / wavelength 635 - 660 nm

FL Controller Unit

FL Laser Unit

Technical Specifications

FL Laser Unit	FL 20	FL 30	FL 50
Laser Type	Diode excited, air-cooled, pulsed fiber laser with integrated pilot laser		
Laser Power	20 W	30 W	50 W
Pulse energy	1 mJ		
Optimum pulse energy	20 kHz	30 kHz	50 kHz
Variable pulse frequency	2 kHz – 200 kHz		
Pulse length / Wave length	100 ns / 1064 nm		
Beam quality	M^2 – 2.0 (optimized for marking)		
Focusing Lens • Distance to product* / Marking area (L x H)	FL 100 98 mm / 65 x 65 mm**	FL160 176 mm / 110 x 110 mm**	FL 255 292 mm / 180 x 180 mm**
Mirror control	Digital, giving highest marking speed		
Dimensions (L x W x H)	420 x 70 x 82 mm		
Weight	1.5 to 2.5 kg (depending on focusing lense)		

* unlimited marking length with moving product   ** unlimited marking length with moving product

FL Operating Terminal	FL 20	FL 30	FL 50
Display	5.7 inch, high-resolution graphics display, 6 LEDs for direct display of status		
User Inferface	Intuitive Benutzerführung über Tastatur und Drehknopf mit Tastfunktion, Unicode basierende Texteingabe		
Languages	To be freely chosen		
Dimensions (W x D x H)	302 x 230 x 66 mm		
Weight	2,7 kg		

FL Controller Unit	FL 20	FL 30	FL 50
Communication	Ethernet, USB		
Digital I/Os	2x 6 Inputs, 2x 4 Outputs – freely configurable		
Accessories	Extraction Units, Encoders, I/O-Kits, Product Sensors, Safety Kits, Signal Lights		
Safety	Interlock (Dual-channel safety circuit)		
Ambient conditions	5 - 40 °C, humidity 5 - 85 % not condensed		
Power Supply	95 - 250 V AC (Autorange) 50/60 Hz		
Dimensions (W x D x T)	160 x 580 x 400 mm (umbilical between laser unit and controller unit: 3 m)		
Weight	21 kg		

Object-oriented Layout Software (Windows® based) REA JET Label Creator

Marking Content	Text-Objects optional with multiple contents and word wrap ● dynamic textfields (Date, Shift, Time, Counter, Reference, buffered Text-Objects) ● Linear-, Circle-, Oval- and Cornermarking etc. ● Logo, numerous 1D + 2D-Codes incl. input wizard for GS1 and other standards
	True Type fonts incl. laser-optimized fonts ● Object-related assignment of marking parameters ● User defined object selection for Pilot laser ● User defined marking order at a standstill and optimized marking order „on the fly"

NiceLabel compatibility: transfer of NiceLabel print layouts using REA JET's own printer drivers.

TITAN — **The REA JET TITAN Platform.** The single operating concept for all REA JET technologies.

Marking of plastic parts

Marking of metal parts

Marking of medical instruments

REA JET